

21. The device of claim 20, wherein the data bus line includes a highly conductive material.

22. The device of claim 20, wherein the data bus line includes one of a Mo metal layer, Mo/Al/Mo triple metal layers, or Cr/Al/Cr triple metal layers.

23. The device of claim 20, wherein the thin film transistor includes gate, source and drain electrodes.

24. The device of claim 23, wherein the gate electrode is electrically connected with the gate bus line.

25. The device of claim 23, wherein the source electrode is electrically connected with the data bus line.

26. The device of claim 23, wherein the drain electrode is electrically connected with the data electrode.

27. The device of claim 20, wherein the first insulator includes a gate insulator.

28. The device of claim 20, wherein the second insulator includes a passivation layer.

29. The device of claim 20, wherein the data electrode partially overlaps the common bus line.

30. The device of claim 20, wherein the common electrode partially overlaps the data electrode.

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31. The device of claim 20, wherein the common electrode includes a transparent conductive material.

32. The device of claim 20, wherein the common electrode includes indium tin oxide.

33. The device of claim 20, wherein the common electrode is electrically connected with the common bus line.

34. The device of claim 20, wherein the common electrode is electrically connected with the common bus line through a hole in the second insulator.

35. The device of claim 20, wherein the common electrode is electrically connected with the common bus line through a hole in the first and second insulators.

36. The device of claim 20, wherein the common electrode partially overlaps the data bus line.

37. The device of claim 20, further comprising a first storage capacitor between the data electrode and the common bus line.

38. The device of claim 20, further comprising a second storage capacitor between the data electrode and the common electrode.

39. The device of claim 20, further comprising:
a first alignment layer on the first substrate.

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40. The device of claim 39, wherein the first alignment layer includes one of polyimide, polyamide, polyvinylcinnamate, or polysiloxane based materials.

41. The device of claim 20, further comprising:

a second substrate;

a black matrix layer on the second substrate;

a color filter layer on the black matrix layer; and

a liquid crystal layer between the first and second substrates.

42. The device of claim 41, wherein the black matrix layer includes Cr or CrOx.

43. The device of claim 41, further comprising:

a second alignment layer on the second substrate.

44. The device of claim 43, wherein the second alignment layer includes one of polyimide, polyamide, polyvinylcinnamate, or polysiloxane based materials.

45. A liquid crystal display device comprising:

first and second substrates;

a gate bus line and a data bus line on the first substrate;

a thin film transistor coupled to the gate and data bus lines;

a common bus line over the first substrate;

a first insulator over the common bus line;

a data electrode over the first insulator;

a second insulator over the data electrode;

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a common electrode over the second insulator;
a black matrix layer on the second substrate;
a color filter layer on the black matrix layer; and
a liquid crystal layer between the first and second substrates.

46. The device of claim 45, wherein the data bus line includes one of a Mo metal layer, Mo/Al/Mo triple metal layers, or Cr/Al/Cr triple metal layers.

47. The device of claim 45, wherein the common electrode includes indium tin oxide.

48. The device of claim 45, further comprising a first storage capacitor between the data electrode and the common bus line.

49. The device of claim 45, further comprising a second storage capacitor between the data electrode and the common electrode.

50. The device of claim 45, wherein the first and second alignment layers include one of polyimide, polyamide, polyvinylcinnamate, or polysiloxane based materials.

REMARKS

This application is a continuation under 37 C.F.R. § 1.53(b) of U.S. Patent Application 09/752,441 filed January 3, 2001. By this Preliminary Amendment, claim 1 has been canceled without prejudice or disclaimer of the subject matter thereof, and new claims 20-50 added.

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